Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-80 (Cancelled)

81. (Currently Amended) A device, comprising:

a manipulandum having a protrusion extending therefrom;

a sensor having a stationary planar surface configured to measure at least one of a position or movement of [[a]] the protrusion in contact therewith ~~along the planar surface~~, wherein the protrusion moves with respect to the stationary planar surface ~~is coupled to a manipulandum~~, the sensor configured to measure a force applied to the planar surface when the manipulandum is moved in a direction substantially perpendicular to the planar surface, wherein the sensor is configured to output a sensor signal associated with at least one of the sensed position or movement or force; and

an actuator coupled to and spaced apart from the sensor, the actuator configured to receive a feedback signal associated with the sensor signal and generate haptic feedback based on the feedback signal.

82. (Previously Presented) The device of claim 81, wherein a magnitude of the haptic feedback is proportional to the measured force.

83. (Previously Presented) The device of claim 81, wherein the haptic feedback is a friction sensation.

84. (Previously Presented) The device of claim 81, wherein the sensor signal updates data values associated with a graphical object associated with the manipulandum in a graphical display.

85. (Previously Presented) The device of claim 81, wherein the sensor signal is associated with a velocity of the protrusion along the planar surface.

86. (Previously Presented) The device of claim 81, wherein the haptic feedback is a texture sensation.

87. (Previously Presented) The device of claim 86, wherein the texture sensation is modulated as a function of a detected degree of force.

88. (Previously Presented) The device of claim 81, wherein the actuator is configured to generate the haptic feedback when the measured force exceeds a desired threshold.

89. (Previously Presented) The device of claim 81, wherein the measured force is operative to control an indexing function of the device.

90. (Previously Presented) The device of claim 81, further comprising a base upon which the sensor is located, the manipulandum configured to move relative to the base.

91. (Previously Presented) The device of claim 90, further comprising a linkage coupled to manipulandum, wherein the linkage is configured to allow motion of the manipulandum relative to the base.

92. (Previously Presented) The device of claim 81, wherein the manipulandum is a computer mouse.

93. (Previously Presented) The device of claim 81, wherein the sensor is a planar photodiode.

94. (Previously Presented) The device of claim 91, wherein the protrusion extends from the linkage.

95. (Previously Presented) The device of claim 91, wherein the linkage is further coupled to the actuator.

96. (Currently Amended) A device, comprising:

a manipulandum moveable in an x-y plane and having a protrusion extending from a portion thereof, the manipulandum configured to operate a graphical object in a graphical user interface;

a sensor having a stationary planar surface configured to be in contact with the protrusion and measure at least one of a position or movement of the protrusion when the protrusion is moved along the stationary planar surface, the ~~touchpad~~ sensor configured to measure a force applied by the protrusion to the planar surface when the manipulandum is moved in a direction substantially perpendicular to the planar surface; and

at least one actuator configured to provide haptic feedback based on the measured force applied to the sensor.

97. (Previously Presented) The device of claim 96, further comprising a control processor configured to send a control signal to the actuator to generate the haptic feedback, the control signal based on at least the measured force.

98. (Previously Presented) The device of claim 96, wherein the haptic feedback output by the actuator includes a damping sensation, wherein a magnitude of the damping sensation is based on at least the measured force.

99. (Previously Presented) The device of claim 98, wherein the damping sensation is proportional to the measured force.

100. (Previously Presented) The device of claim 96, wherein the haptic feedback output by the actuator includes a friction sensation, a magnitude of the friction sensation based on at least the measured force.

101. (Previously Presented) The device of claim 96, wherein the friction sensation is proportional to the measured force.

102. (Previously Presented) The device of claim 96, wherein the haptic feedback output by the actuator includes a texture sensation, a magnitude of the texture sensation based on at least the measured force.

103. (Previously Presented) The device of claim 102, wherein the texture sensation is proportional to the measured force.

104. (Previously Presented) The device of claim 96, further comprising a linkage coupled to manipulandum, wherein the linkage is configured to allow motion of the manipulandum relative to a base.

105. (Previously Presented) The device of claim 104, wherein the protrusion extends from the linkage.

106. (Previously Presented) The device of claim 104, wherein the linkage is further coupled to the actuator.

107. (Currently Amended) A method, comprising:

measuring at least one of a position or a motion of a protrusion in contact with and moving with respect to a stationary planar surface of a sensor, wherein the protrusion is coupled to a manipulandum;

measuring a force applied from the protrusion to the planar surface of the sensor when the manipulandum is moved in a direction substantially perpendicular to the planar surface;

receiving a feedback signal associated with at least one of the detected position, motion, or force of the protrusion, the feedback signal based on data values associated with a graphical object in a graphical display, the graphical object controlled by the manipulandum; and

outputting haptic feedback to the manipulandum via an actuator upon receiving the feedback signal.

108. (Previously Presented) The method of claim 107, wherein a magnitude of the haptic feedback is increased in response to an increase in the measured force.

109. (Previously Presented) The method of claim 107, wherein the outputting haptic feedback further includes simulating friction.

110. (Previously Presented) The method of claim 107, wherein the actuator outputs the haptic feedback upon the measured force being greater than a desired threshold.

111. (Previously Presented) The method of claim 107, further comprising controlling an indexing function of a user interface device based on the measured force.